IN THE CLAIMS:

Cancel claim 47 without prejudice or disclaimer.

Please amend the claims as shown below:

Claims 1-24 (cancelled)

Claim 25 (currently amended): A bacterium ~~comprising~~ transformed with an isolated polynucleotide which encodes an acyl-CoA synthase comprising the amino acid sequence of SEQ ID NO: 2.

Claim 26 (previously presented): The bacterium of claim 25, wherein said bacterium is a coryneform bacterium selected from the group consisting of Corynebacterium glutamicum, Corynebacterium acetoglutamicum, Corynebacterium acetoacidophilum, Corynebacterium thermoaminogenes, Corynebacterium melassecola, Brevibacterium flavum, Brevibacterium lactofermentum and Brevibacterium divaricatum or from the species Escherichia coli.

Claim 27 (currently amended): The bacterium of claim 25, wherein said acyl-CoA synthase encoded by said isolated polynucleotide is overexpressed, and wherein said overexpression is achieved by increasing the number of copies of said isolated polynucleotide by transformation of said bacterium with ~~an expression~~ a vector which comprises said isolated polynucleotide.

Claim 28 (cancelled)

Claim 29 (previously presented): The bacterium of claim 27, wherein said isolated polynucleotide coding for said acyl-CoA synthase is comprised in a plasmid vector.

Claim 30 (previously presented): The bacterium of claim 29, wherein said plasmid vector is pJC1fad15 deposited under Corynebacterium glutamicum DSM 13249.

Claim 31 (previously presented): An isolated polynucleotide comprising a polynucleotide which encodes an acyl-CoA synthase comprising the amino acid sequence of SEQ ID NO: 2.

Claim 32 (previously presented): The polynucleotide of claim 31, wherein said polynucleotide is a recombinant DNA which is capable of replication in coryneform bacteria.

Claim 33 (previously presented): The polynucleotide of claim 31, wherein said polynucleotide is an RNA.

Claim 34 (previously presented): An isolated polynucleotide, consisting of SEQ ID NO: 1 or a fragment thereof which encodes an acyl-CoA synthase.

Claim 35 (previously presented): The isolated polynucleotide of claim 34, wherein said acyl-CoA synthase consists of the amino acid sequence of SEQ ID NO: 2.

Claim 36 (previously presented): An isolated polynucleotide consisting of at least 15 consecutive nucleotides selected from SEQ ID NO: 1 or the complete complement thereof,

wherein said isolated polynucleotide is a primer in a polymerase chain reaction for the synthesis of a polynucleotide which encodes an acyl-CoA synthase.

Claim 37 (previously presented): An isolated polynucleotide consisting of at least 15 consecutive nucleotides selected from SEQ ID NO: 1 or the complete complement thereof, wherein said isolated polynucleotide is a probe in a hybridization reaction for the isolation of a polynucleotide which encodes an acyl-CoA synthase.

Claim 38 (previously presented): The polynucleotide of claim 36, wherein said acyl-CoA synthase comprises the amino acid sequence of SEQ ID NO: 2.

Claim 39 (previously presented): The polynucleotide of claim 37 wherein said acyl-CoA synthase comprises the amino acid sequence of SEQ ID NO: 2.

Claim 40 (previously presented): An isolated polynucleotide comprising the complete complement of SEQ ID NO: 1.

Claim 41 (previously presented): A vector comprising the isolated polynucleotide of claim 31.

Claim 42 (previously presented): The vector according to claim 41, wherein said vector is p JC1 fad15 deposited under DSM13249.

Claim 43 (previously presented): A vector comprising the isolated polynucleotide of claim 40.

Claim 44 (previously presented): A vector comprising the isolated polynucleotide of claim 34.

Claim 45 (previously presented): The vector according to claim 44, wherein said vector is p JC1 fad15 deposited under DSM13249.

Claim 46 (previously presented): An isolated polynucleotide, comprising nucleotides 247 to 2103 of SEQ ID NO: 1 or a degenerate variant thereof which encodes an acyl-CoA synthase.

Claim 47 (canceled) The isolated polynucleotide of claim 46, wherein said acyl-CoA synthase comprises the amino acid sequence of SEQ ID NO: 2. (We regret the confusion created by not sending this claim in our June 25, 2003 letter. We had previously sent you a copy of claims 46 and 47 in our June 12, 2003 letter. In any event, as explained in our June 12, 2003 letter, the Examiner is requiring that this claim be canceled.)